

HOW CAN GOVERNANCE LEAD TO A NEW INDUSTRIAL VISION FOR EUROPE?

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STOCK TAKING OF ENERGY TRANSITION

Looking back to 20 years of ,energy transition‘:

- Initially, single technologies (e.g. wind, PV, biomass) have been dominating
- First measurable successes due to progress in these market segments
- Now, more systemic solutions are required
- E.g. smart technologies for digitization, storage solutions, etc.
- AND energy transition is becoming a globalized topic

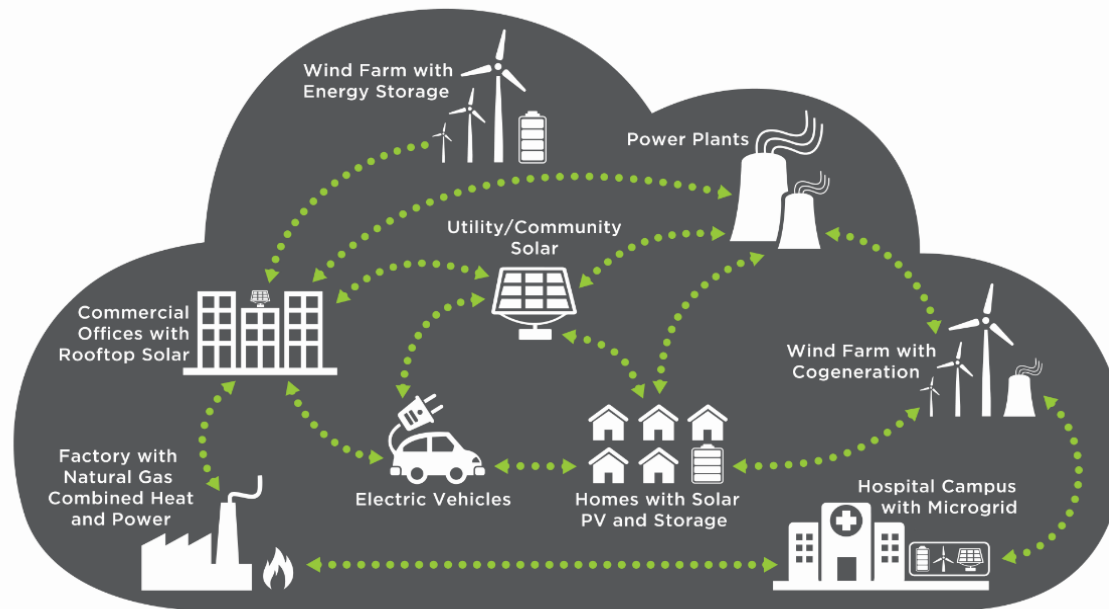


Figure 1: The Energy Cloud 4.0 (Source: Navigant 2018)

ENERGY TRANSITION GETTING GLOBAL

For different motivations, various regions of the world are becoming active players in the energy transition:

- In Silicon Valley in California, a large number of innovative clean tech companies evolved (based on excellently trained staff, infrastructure, availability of risk capital)
- In China, a successful PV sector with 1.6 mln employees has been built up (based on strategic & targeted industrial policy with tax reductions, subsidies, loans etc.)
- The United Arab emirates, Saudi Arabia and neighbours are heavily investing in clean energy technologies and according value chains, aiming for exporting renewable energy

EU is generally well positioned but needs to take up this challenge along the following lines:

- System innovation is key
- Value chains need to be kept / built up strategically
- Policy toolbox needs to be used towards integrated industrial policy

CORE AIMS OF CLEAN ENERGY PACKAGE

Respond to increasing complexity of the energy transition

Create compatibility with Paris agreement

- EU should **lead** clean energy transition, not only adapt to it
- Cut GHG emissions by at least 40%
- Modernize EU's economy
- Create growth and jobs for all Europeans
- EE first
- Achieve global leadership in RE
- Provide fair deal to consumers
- Consumers => active & central players in energy markets
- Possibility to produce & sell own energy
- Protect most vulnerable consumers

OVERVIEW CLEAN ENERGY PACKAGE

Recast of existing directives

- RE
 - Recast of RE directive
 - Trilogue agreement: 32% RE by 2030
 - No individual country targets, but calculation formula
- EE
 - Recast of EED and EPBD
 - Review of EE target 2030 based on PRIMES baseline (2007)
=> Trilogue agreement: (non-binding) 32.5% EE target by 2030, review in 2023
 - Article 7 EED
=> Trilogue agreement: obligatory 0.8% annual savings
 - New product proposals for Ecodesign directive
- Power market design directive
 - Recast of power market directive and subsequent regulation

New directive:

- governance directive
 - Integrated governance for climate protection and energy

OVERVIEW GOVERNANCE DIRECTIVE (1)

- integrate & simplify reporting / monitoring obligations of EC and EU MS
- easier monitoring of MS progress in achieving the Energy Union's objectives, mainly 2030 targets for energy and climate
- NECPs (Nat'l Energy & Climate Plans) to be prepared by MS for period 2021-2030 (binding templates)
- followed by biennial progress reports
- If the 2030 climate and energy goals are at risk of not being met, the Commission may request additional measures
- The reform also includes enhanced procedures for public and regional consultations

Trilogue agreement:

- Carbon budget (remaining emissions in line with 'well below 2 degrees and close to 1.5 target)
- Net-zero emissions (as early as possible) and national strategies towards 2050 => in line with Paris Agreement
- => countries to present long term decarbonisation strategies for 2050
- => in line with 2030 plans
- => NECPs by 31 Dec 2018
- => by end 2019 strategies for 2030 and 2050

OVERVIEW GOVERNANCE DIRECTIVE (2)

- Gap filler mechanism for RE and EE
- EU-MS to reach collectively RE shares of 18% by 2022, 43% by 2025, and 65% by 2027 before reaching 100% of the objective in 2030 (i.e. 32% of overall share)
- Reduced free-riding effect: intervention of EC possible if country not on track, measures to be adopted at national level
- Similar mechanism agreed for EE with same reference years
- difference to RE: evaluation of gap is left to discretion of EC, which will also decide on policy initiatives to fill the gap – such as eco-design measures, labelling and CO2 standards in cars or buildings.
- “Efficiency First” principle to be included in national plans when making decisions on new infrastructure.

PHASES DEVELOPMENT OF POLICY INSTRUMENTS

Looking back to 20 years of policy evaluation:

First phase (approx. 1998 – 2015):

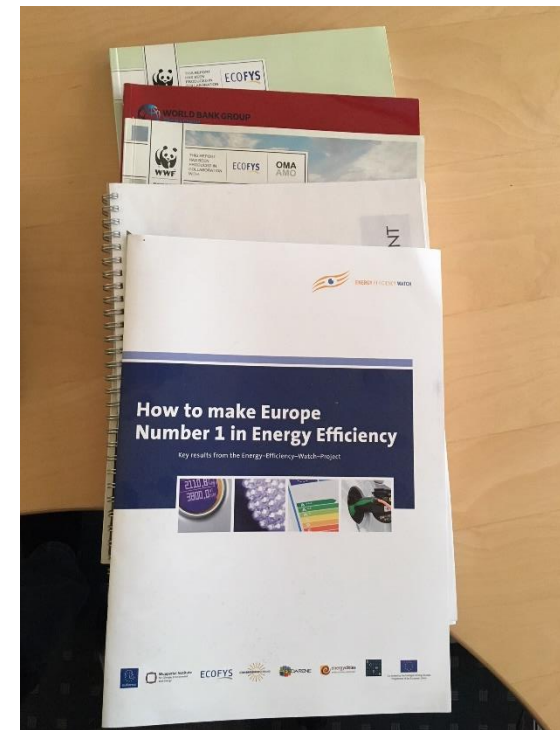
- Initial challenge: translate theoretical approaches into viable policies
- Regularly monitor if effective & efficient
- Evaluate impact & provide advice for adjustment
- A lot of trial & error
- Often ideological debates (e.g. market based vs regulatory etc.)

Second phase (approx. 2016 – 19):

- CEP to be implemented
- In EU-28, an enormous variety of policy instruments has evolved
- Many of them can be called good practice
- Well-filled policy tool box
- NECPs can be very powerful

Third phase (2020 – 2030):

- Refine policies & adjust to systemic complexity
- Bring in line with Paris agreement
- implement, by generating all necessary acceptance!



NATIONAL PLANS AS EFFECTIVE TOOLS

- Under the EU (IEE) project 'Energy Efficiency Watch', national energy efficiency plans (NEEAPs) were evaluated
- Progress in policy making was made comparable
- Providing orientation, a.o. for business community
- <http://www.energy-efficiency-watch.org>
- NECPs can become similarly important



IMPLEMENTATION OF POLICIES

- What we often realize in our comparative impact assessments is a deficit in policy implementation, caused by lack of political will
- Even if mandatory, policies often get stuck in debate, are considered as ‚not highest priority on nat‘l policy agenda‘ or ‚in conflict with other important goals‘ ...
- Often ideological elements used in debates
- Frequent policy changes or incomplete implementation => problematic for investment climate
- More problematic for addressing increased complexity

However: in some contexts, the policy environment remains stable, e.g. after changes in government – why?

⇒ Narrative in place, why energy transition is positively connotated

⇒ Broad public acceptance beyond boundaries of political parties or lobby groups

⇒ What can be learnt from these examples for the policy making process?

THE ROLE OF NARRATIVES

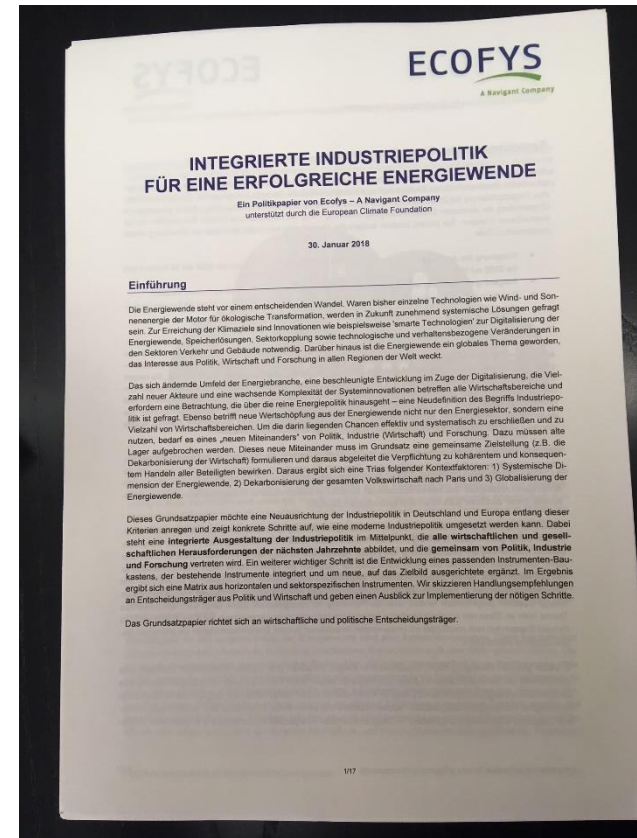
- Various country examples show that narratives are key success factors for policies
- Narratives are highly country specific
- Should be embedded in joint European narrative
- e.g. leading technological role
- Composed of a multitude of benefits
- Need to reflect a country's individual situation
- Critical assessment of risks and benefits
- Not co- but **key** benefits, outweighing risks
- Decide on acceptance beyond climate change



Figure 2: Benefits of Energy Efficiency (Source: IEA 2014)

NEW INDUSTRIAL VISION

- EU should be leading
- Preconditions are good!
- Regulation can help in generating ambition
- Strategic thinking required
- value chains, not single technologies
- Apply industry policy tool box
- E.g. special economic areas, infrastructure, research
- Complementary between EU-MS
- Structural change is tough but also big chance
- Concerted action policy makers – business needed



<https://www.ecofys.com/de/publications/integrierte-industriepolitik-fur-eine-erfolgreiche-energiewende/>

CONCLUSIONS

- CEP can become powerful if well implemented
- NECP can be effective instrument
- Standard & binding templates helpful
- Policy tool box is there
- Mutual learning encouraged
- Keep in mind EU vision against background of international competition
- Industrial dimension
- From policy angle a lot has been reached
- Remaining risk of slowish progress
- Breakthrough and thus EU leading role depends on willingness to implement
- Pay attention to implementation
- Underpin policies by narratives, creating acceptance